

METHODS FOR PURIFYING CAMPTOTHECIN COMPOUNDS; ALKALOIDS PURIFIED
BY REFLUX AND SALT FORMATION, MONITORING BY THIN LAYER CHROMATOGRAPHY

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Abstract:

Methods for purifying 20(S)-camptothecin are described. The 20(S)-camptothecin in purified form is useful in the treatment of cancer.

Exemplary Claim:

D R A W I N G

1. A method of purifying 20(S)-camptothecin comprising the steps of: (1) heating under reflux a mixture of a starting natural plant material containing 20(S)-camptothecin and an excess amount of acetic acid under a continuous stream of an inert gas to form a mixture, wherein said starting natural plant material containing 20(S)-camptothecin is selected from the group consisting of Camptotheca acuminata, Mappie foetida Miers, ophiorrhiza mungos, and Erratama heyneana; (2) adding HBr, HCl or a mixture thereof to said mixture in an effective amount to dissolve said starting plant material containing 20(S)-camptothecin and continuing said heating under reflux until the starting plant material containing 20(S)camptothecin is dissolved to form a solution; (3) monitoring said heating under reflux by means of thin layer chromatography and continuing said heating until the material immediately following 20(S)-camptothecin on a thin layer chromatography plate has disappeared; and (4) filtering impurities from the 20(S)-camptothecin.

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